



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2006-23809; Directorate Identifier 2005-NE-52-AD; Amendment 39-17866; AD 2014-12-05]

RIN 2120-AA64

Airworthiness Directives; Turbomeca S.A. Turboshift Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are superseding airworthiness directive (AD) 2007-10-07 for all Turbomeca S.A. Arriel 2B, 2B1, and 2B1A turboshaft engines. AD 2007-10-07 required an inspection of the splines of the coupling assembly and the hydro-mechanical metering unit (HMU) drive gear shaft for wear. This AD requires the same inspection and expands the affected population. This AD also removes Arriel 2B1A engines from the applicability. We are issuing this AD to prevent failure of the HMU drive gear shaft, which could lead to damage to the engine and damage to the airplane.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this AD, contact Turbomeca, S.A., 40220 Tarnos, France; phone: 33 (0)5 59 74 40 00; telex: 570 042; fax: 33 (0)5 59 74 45 15. You may view this service information at the FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2006-23809; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the mandatory continuing airworthiness information (MCAI), the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is Document Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Michael Davison, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park; phone: (781) 238-7156; fax: (781) 238-7199; email: Michael.Davison@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2007-10-07, Amendment 39-15048 (72 FR 26711, May 11, 2007), (“AD

2007-10-07”). AD 2007-10-07 applied to the specified products. The NPRM published in the Federal Register on February 21, 2014 (79 FR 9868). The NPRM proposed to require the same inspection as AD 2007-10-07 and expand the affected population. The NPRM also proposed to remove Arriel 2B1A engines from the applicability.

Comments

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM (79 FR 9868, February 21, 2014).

Conclusion

We reviewed the available data and determined that air safety and the public interest require adopting this AD as proposed.

Costs of Compliance

We estimate that this AD affects 470 engines installed on aircraft of U.S. registry. We also estimate that it will take about 2 hours per engine to comply with this AD. The average labor rate is \$85 per hour. Based on these figures, we estimate the cost of this AD on U.S. operators to be \$79,900.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA’s authority to issue rules on aviation safety. Subtitle I, Section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the Agency’s authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701, “General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by

prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by removing airworthiness directive (AD) 2007-10-07, Amendment 39-15048 (72 FR 26711, May 11, 2007), and adding the following new AD:

2014-12-05 Turbomeca S.A: Amendment 39-17866; Docket No. FAA-2006-23809; Directorate Identifier 2005-NE-52-AD.

(a) Effective Date

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD supersedes AD 2007-10-07, Amendment 39-15048 (72 FR 26711, May 11, 2007).

(c) Applicability

This AD applies to all Turbomeca S.A. Arriel 2B, 2B1, 2C, 2C1, 2C2, 2S1, and 2S2 turboshaft engines.

(d) Unsafe Condition

This AD was prompted by a report of an additional case of wear of the hydro-mechanical metering unit (HMU) drive gear shaft splines on both Turbomeca S.A. Arriel 2 engines on a twin-engine helicopter. We are issuing this AD to prevent failure of the

HMU drive gear shaft, which could lead to damage to the engine and damage to the aircraft.

(e) Compliance

Comply with this AD within the compliance times specified, unless already done.

(1) Arriel 2B and 2B1 Engines

(i) If on the effective date of this AD the HMU has 500 or more operating hours since new or since last overhaul, then within 25 HMU operating hours from the effective date of this AD, inspect the high-pressure (HP) pump drive gear shaft splines and coupling shaft assembly splines. Use paragraph 2.B.(1)(b) of Turbomeca S.A. Mandatory Service Bulletin (MSB) No. 292 73 2812, Version G, dated June 24, 2013, to do your inspection.

(ii) If on the effective date of this AD the HMU has less than 500 operating hours since new or since last overhaul, then inspect the HP pump drive gear shaft splines and coupling shaft assembly splines between 500 and 525 operating hours since new or since last overhaul. Use paragraph 2.B.(1)(b) of Turbomeca S.A. MSB No. 292 73 2812, Version G, dated June 24, 2013, to do your inspection.

(2) Arriel 2C, 2C1, 2C2, 2S1, and 2S2 Engines

(i) If on the effective date of this AD the HMU has 500 or more operating hours since new, since last overhaul, or if HMU operating hours are unknown, then within 200 HMU operating hours from the effective date of this AD, inspect the HP pump drive gear shaft splines and coupling shaft assembly splines. Use paragraph 2.B.(1)(b) of Turbomeca S.A. MSB No. 292 73 2822, Version F, dated June 21, 2013, to do your inspection.

(ii) If on the effective date of this AD the HMU has more than 300 but less than 500 operating hours since new or since last overhaul, then within 225 HMU operating hours, but no earlier than 500 or later than 700 HMU operating hours from the effective date of this AD, inspect the HP pump drive gear shaft splines and coupling shaft assembly splines. Use paragraph 2.B.(1)(b) of Turbomeca S.A. MSB No. 292 73 2822 Version F, dated June 21, 2013, to do your inspection.

(iii) If on the effective date of this AD the HMU has 300 operating hours or less since new or since last overhaul, then inspect the HP pump drive gear shaft splines and coupling shaft assembly splines between 500 and 525 HMU operating hours since new or since last overhaul. Use paragraph 2.B.(1)(b) of Turbomeca S.A. MSB No. 292 73 2822, Version F, dated June 21, 2013, to do your inspection.

(f) Credit for Previous Actions

If, before the effective date of this AD, you inspected your HMU after 500 HMU operating hours since new or since last overhaul using an earlier version of Turbomeca S.A. MSB No. 292 73 2822, Version F, dated June 21, 2013, for 2C, 2C1, 2C2, 2S1 and 2S2 engines, or MSB No. 292 73 2812, Version G, dated June 24, 2013, for 2B or 2B1 engines, you have met the requirements of this AD.

(g) Installation Prohibition

After the effective date of this AD, do not install any HMU onto any engine, nor install any engine onto any helicopter with an HMU affected by this AD, unless the HMU passed the inspection required by paragraph (e)(1) of this AD for Arriel 2B and 2B1 engines or paragraph (e)(2) of this AD for Arriel 2C, 2C1, 2C2, 2S1, and 2S2 engines.

(h) Alternative Methods of Compliance (AMOCs)

The Manager, Engine Certification Office, FAA, may approve AMOCs to this AD. Use the procedures found in 14 CFR 39.19 to make your request.

(i) Related Information

(1) For more information about this AD, contact Michael Davison, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park; phone: (781) 238-7156; fax: (781) 238-7199; email: Michael.Davison@faa.gov.

(2) Refer to MCAI European Aviation Safety Agency AD 2013-0170, dated July 30, 2013, for related information. You may examine the MCAI in the AD docket on the Internet at <http://www.regulations.gov/#!docketDetail;D=FAA-2006-23809>.

(j) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Turbomeca S.A. Mandatory Service Bulletin (MSB) No. 292 73 2822, Version F, dated June 21, 2013.

(ii) Turbomeca S.A. MSB No. 292 73 2812, Version G, dated June 24, 2013.

(3) For Turbomeca S.A. service information identified in this AD, contact Turbomeca, S.A., 40220 Tarnos, France; phone: 33 (0)5 59 74 40 00; telex: 570 042; fax: 33 (0)5 59 74 45 15.

(4) You may view this service information at FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

(5) You may view this service information at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Burlington, Massachusetts, on June 2, 2014.

Colleen M. D'Alessandro,
Assistant Directorate Manager, Engine & Propeller Directorate,
Aircraft Certification Service.

[FR Doc. 2014-14951 Filed 06/27/2014 at 8:45 am; Publication Date: 06/30/2014]